Goal of MobileCityGame

Achieve climate neutrality in 2035 while maintaining livability and not going bank-rupt.

User interface

Intuitive features to set and control measures in building, regulation, pricing, campaigns, administration and policy packages.

- Three assessment modules on climate gas emissions, livability and citizen satisfaction, and on municipal financing
- Analytical tools for districts, mobility parameters, GHG emissions, user impacts and finances
- Direct feedback through messages, info-boxes and score indicators
- In-game tutorial for deeper insights.

Team and contact

Project Coordination:

Fraunhofer Institute for Systems and Innovation Research ISI
Breslauer Straße 48
76139 Karlsruhe, Germany

Claus Doll
claus.doll@isi.fraunhofer.de
+49 721 6809-354

www.isi.fraunhofer.de/mobilecitygame

Project partners:

- Fraunhofer Institute of Optronics, System Technologies and Image Exploitation IOSB

- Karlsruhe Institute of Technology (KIT)
  - Institute for Transport Studies (IfV)
  - Institute of Economics (ECON)
  - Institute of Vehicle Systems Technology (FAST)
  - Institute of Product Engineering (IPEK)

- Takomat GmbH, Köln
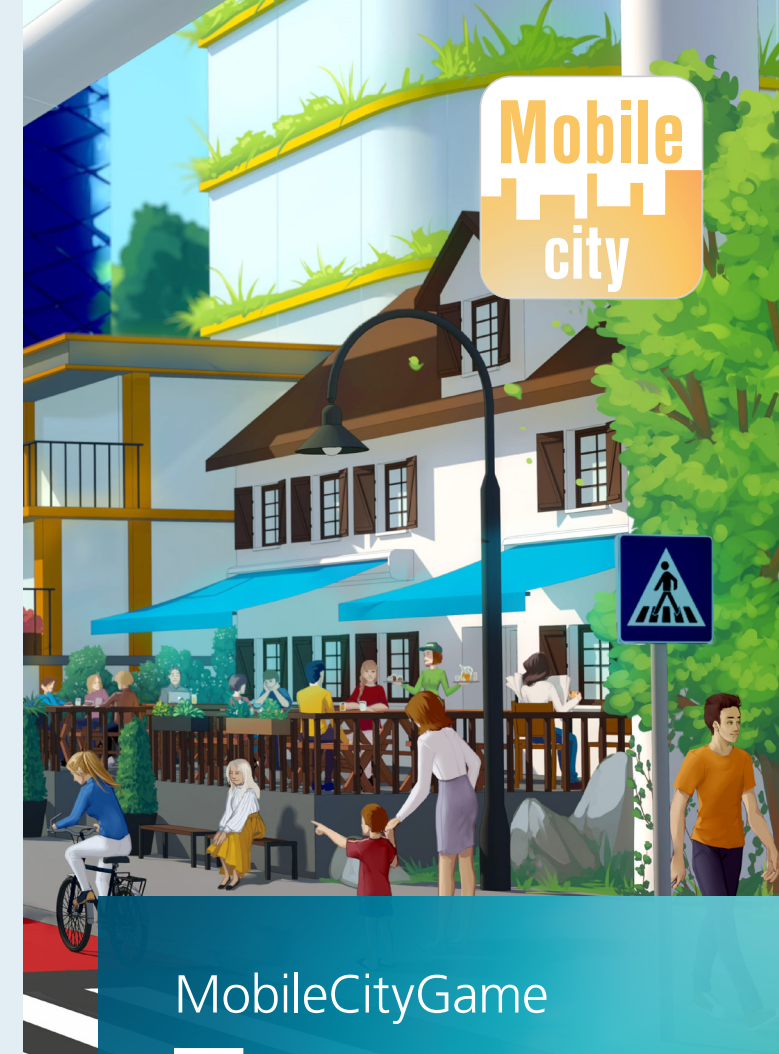
MobileCityGame

Play Urban Mobility Transitions to 2050

MobileCityGame

Play Urban Mobility Transitions to 2050

The first fully developed dynamic transport and mobility model for playful scenario development, impact assessment and citizens' participation processes. Make your city's mobility system climate-neutral, user-friendly and financially viable. Initial application to the city of Karlsruhe, Germany.

Players Choice

Build & Invest

Regulation

Pricing

Campaigns

Administration

Game Engine Model

Population
Regions
Fleets
Infrastructure
Behavior
Travel Demand
Mode Choice
Emissions

Outputs

Climate

Livability

Finance

What do we want to achieve?

MobileCityGame provides city planners, NGOs, academia and the general public with an intuitive tool for developing and assessing scenarios for planning mobility in cities.

Our vision for ...

### Policymakers and city planners:

Use MobileCityGame to rapidly assess future mobility pathways for your city in meetings or workshops. The App can simplify participation processes via its built-in poll and user feedback functions.

Academia and education:

Use MobileCityGame in schools and universities to improve students' understanding of the power, limits and interdependencies of urban mobility systems.

General public:

MobileCityGame can help you to better understand policymaking – but is also simply fun to play! Its graphical interface and links to real city maps can help you compare your actions in the game with real-world developments in your home town.
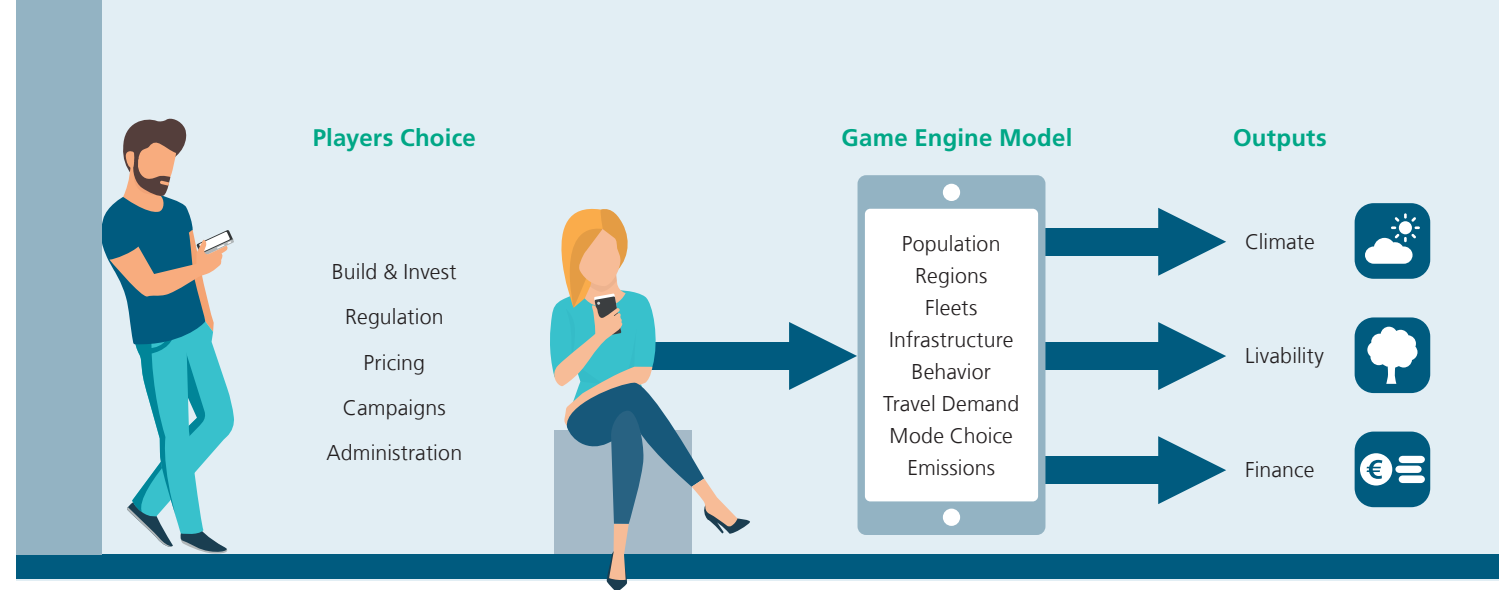
Key aspects of MobileCityGame

MobileCityGame combines the following features in one app on iOS and Android smartphones and tablets:

- Combines three mobility models from KIT and Fraunhofer
- Incorporates the latest insights from psychology and transport economics
- Dynamic interaction of 10 thematic modules from 2018 to 2050
- Geographical scope for Karlsruhe, Germany: 300 000 inhabitants, 27 city districts, 15 peri-urban areas
- All passenger transport modes including e-cars and shared vehicles
- Scenario development within 30 minutes
- Intuitive user interface
- More than 20 measures in building, regulation, pricing, campaigns and administration
- Detailed outputs in three categories: climate, livability and financing

The technology

- Seven dynamically interlinked computational modules on regions, infrastructures, fleets and user behavior
- Stock models for population by age group and city district, and for vehicle fleets by propulsion system
- Hypernets with links to key infrastructures for cars, bikes and public transport
- Attractiveness of districts and regions through points of interest, including workplaces, schools, shops and green areas
- Behavioral model for destination and transport mode choice and for vehicle purchase

The app is available for iOS and Android devices: